

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/003,988	10/31/2001	Arthur Lane Bentley	<u></u>	6034	
7:	590 01/24/2006		EXAMINER		
Arthur Lane Bentley			SHAPIRO, LEONID		
10252 South 2375 East Sandy, UT 84092			ART UNIT	PAPER NUMBER	
•			2677		
		DATE MAILED: 01/24/2006			

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)					
Office Action Summary		10/003,988	BENTLEY, ARTHUR LANE					
		Examiner	Art Unit					
		Leonid Shapiro	2677					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filled after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filled, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1)⊠	Responsive to communication(s) filed on <u>07 O</u>	ctober 2005.						
·	This action is FINAL . 2b) \boxtimes This action is non-final.							
3)	,—							
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims								
4)⊠ Claim(s) <u>3,15-22,29 and 30</u> is/are pending in the application.								
	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)⊠ Claim(s) <u>3,19-22 and 29</u> is/are allowed.								
·	5)⊠ Claim(s) <u>15-18, 30</u> is/are rejected.							
7)	Claim(s) is/are objected to.							
8) 🗌	8) Claim(s) are subject to restriction and/or election requirement.							
Applicati	ion Papers							
9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
	ınder 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a) ☐ All b) ☐ Some * c) ☐ None of:								
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage								
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.								
•								
Attachment(s)								
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da						
3) 🔲 Inforr	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) D Notice of Informal Pa	atent Application (PTO-152)					
rape	r No(s)/Mail Date	6) 🔲 Other:						

Claim Rejections - 35 USC § 102

1. Claim 16 is rejected under 35 U.S.C. 102(e) as being anticipated by Altman, USPN 6,239,774 B1.

Claim 16

Altman teaches a kinetic apparatus [wand 1] for producing visual displays based on the persistence of vision effect of human vision comprising:

a lighted array [column of lights 2] of light emitting elements. Altman, col. 3, lines 4 – 49; and figure 1.

a controller [processor 14] is coupled to the elements of the lighted array [column of lights 13]; the controller is programmed to deliver display data in a piecewise fashion to said lighted array. Altman, col. 5, lines 25 – 61; and figure 3.

a multi-degree sensor for detecting angular motion of lighted array; said controller (figure 3, items 14, 18) is programmed to process changes in inertia detected by multi-degree sensor. Altman, col. 4, lines 7 – 59; and figures 2A & 2B.

Claim Rejections - 35 USC § 103

2. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta et al., USPN 5,444,456, in view of Altman.

Claim 15

Ohta describes an apparatus for producing visual displays that comprising:

at least one lighted array comprised of at least one light emitting element and defining a style of predetermined graphics shape or alphanumeric characters [LED array 23];

controller to deliver display data in a columnar piecewise fashion to said lighted array;

whereby the predetermined graphics or alphanumeric characters appear and hang in mid air when the device is moved through space. Ohta, col. 5, lines 3-33; and figures 9 and 11a.

Ohta does not specifically teach a double-throw inertia reversal sensor for sensing reversals in the direction of inertia and controller in communication with array and programmed to process adjacent inertia reversals detected by inertia reversal sensor.

Altman teaches a double-throw inertia reversal sensor for sensing reversals in the direction of inertia (Altman, col. 4, lines 7 – 59 and figures 2A & 2B) and controller in communication with array and programmed to process adjacent inertia reversals detected by inertia reversal sensor (figure 3, items 14, 18).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine teachings by Altman with the device and method as taught by Ohta in order to perceive only the image proper and not the mirror image (See Col. 4, Lines 18-22 in the Altman reference).

1. 3

3. Claims 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Altman in view of Bell, USPN 4,470,044.

Claim 17

Altman does not disclose the lighted array sweeps rotates at variable speed around the circumference of a circle; thereby producing a visual display of text or graphics which appears stable or precedes or recedes around a central pivot point.

Bell teaches the lighted array sweeps rotates at variable speed around the circumference of a circle; thereby producing a visual display of text or graphics which appears stable or precedes or recedes around a central pivot point. Bell, col. 7, lines 38 – 61; and figure 6.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine teachings by Bell with the device and method as taught by Altman in order to simplify implementation (See Col. 1, Lines 53-57 in the Bell reference).

4. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Altman and Bell in view of NakaMats, USPN 6,249,998 B1.

Claim 18

Bell teaches a motor means [motor shaft (35)(36)] which moves the array. Bell, col. 7, lines 38 - 52; and figure 6.

Altman and Bell do not teach that the display being adjusted such that the text and graphics displayed in the lower half of the circle are correctly oriented, matching the

Art Unit: 2677

orientation of graphics in the upper half of the circle; whereby a viewer is enabled to view a display in which no text or graphics are inverted.

NakaMats teaches that the display is adjusted such that the text and graphics displayed in the lower half of the circle are correctly oriented, matching the orientation of graphics in the upper half of the circle; whereby a viewer is enabled to view a display in which no text or graphics are inverted. NakaMats, col. 7, line 51 – col. 4, line 27; and figures 7 & 8.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the adjusted display as shown by NakaMats with the display device as taught by Altman and Bell so that the letters and graphics are correctly oriented.

5. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Altman and Bell in view of Bednarz, USPN 4,264,845.

Claim 30

Altman and Bell do not specifically teach a mode of operation exists wherein the controller itself randomly selects programmed data for display; whereby the user is entertained by the randomness of the display.

Bednarz teaches a ornamental light display including an LED array having a controller [multiplexer M] that randomly selects programmed data for display; whereby the user is entertained by the randomness of the display. Bednarz, col. 1, lines 6 - 10, 52 - 64; and figure 1.

Application/Control Number: 10/003,988 Page 6

Art Unit: 2677

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the random display as taught by Bednarz with the display device as taught by Altman and Bell to provide interesting and attractive ornamental displays. Bednarz invites such combination by teaching, "This invention relates to ornamental light displays and to a novel and improved method and circuit for illuminating lamps in orderly or substantially random patterns to provide interesting and attractive ornamental displays." Bednarz, col. 1, lines 6 – 10, 29 – 41. Bednarz adds.

This invention provides a novel and improved circuit for illuminating light sources which will afford a great variety of displays and which may be readily controlled by a variety of sources of energy such as oscillators, sound waves, random noise signals and the like depending on the nature of the lighting display desired.

Another object of the invention resides in the provision of a novel and improved circuit which may be utilized to control the illumination of a plurality of light sources to obtain a great variety of patterns and is relatively inexpensive and compact and utilizes relatively small quantities of power to effect control of the light sources.

Bednarz, col. 1, lines 29 - 41.

Allowable Subject Matter

6. Claims 3, 19-22, and 29 are allowed.

Response to Arguments

6. Applicant's arguments with respect to claim 15 have been considered but are most in view of the new ground(s) of rejection.

7. Applicant's arguments filed 10.07.05 have been fully considered but they are not persuasive:

On page 10, 2nd paragraph Applicant's stated in relation to independent claim 16, that Altman discloses a simple sensor solely for detecting reversals of inertia. However, Altman teaches exactly a multi-degree sensor for detecting angular motion. It is understood that this sensor is used for detecting angular motion (See Figs. 1-3) and this motion is more than single-degree.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (a multi-degree sensor for detecting angular motion as disclosed by Applicant) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Telephone Inquire

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 571-272-7683. The examiner can normally be reached on 8 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on 571-272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/003,988 Page 8

Art Unit: 2677

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LS 01.20.05

PRIMARY EXAMINER